WHAT IS CLAIMED IS:

1. An optical isolator element, comprising:

at least one flat Faraday rotator, and

at least two flat polarizers,

wherein the Faraday rotator and the polarizers are bonded to each other by van der Waals forces acting between bonding surfaces thereof.

2. An optical isolator element according to claim 1, wherein the bonding surfaces of at least either one of the Faraday rotator and the polarizers are integrally provided with films made of an inorganic material.

3. An optical isolator element according to claim 1, wherein the bonding surfaces of at least either one of the Faraday rotator and the polarizers are integrally provided with films made of a soft material.

4. An optical isolator element, comprising:

at least one flat Faraday rotator, and

at least two flat polarizers,

wherein the Faraday rotator and the polarizers are bonded to each other by hydrogen-bonding forces acting between bonding surfaces thereof.

5. An optical isolator element according to claim 4, wherein the bonding surfaces of at least either one of the Faraday rotator and the polarizers are integrally provided with films made of an inorganic material.

6. An optical isolator element according to claim 4, wherein the bonding surfaces of at least either one of the Faraday rotator and the polarizers are integrally provided with films made of a soft material.

7. An optical isolator comprising:

an optical isolator element including at least one flat Faraday rotator and at least two flat polarizers bonded to each other by van der Waals forces acting between bonding surfaces thereof, and

a magnetic element arranged around the optical isolator element.

8. An optical isolator element according to claim 7, wherein the magnetic element is tubular and the optical isolator element is arranged inside the tubular magnetic element.

9. An optical isolator comprising:

an optical isolator element including at least one flat Faraday rotator and at least two flat polarizers bonded to each other by hydrogen-bonding forces acting between bonding surfaces thereof, and

a magnetic element arranged around the optical isolator element.

10. An optical isolator element according to claim 9, wherein the magnetic element is tubular and the optical isolator element is arranged inside the tubular magnetic element.

11. A method for producing an optical isolator element

including at least one flat Faraday rotat r and at l ast two flat polarizers bonded to each other, comprising the steps of:

activating bonding surfaces of the Faraday rotator and the polarizers, and

bringing the Faraday rotator and the polarizers having the bonding surfaces activated into contact with each other in vacuum, thereby bonding the Faraday rotator and the polarizers by van der Waals forces created on the bonding surfaces of the Faraday rotator and the polarizers.

12. A method according to claim 11, wherein a step of smoothing the bonding surfaces of the Faraday rotator and the polarizers is performed before the step of activating the bonding surfaces of the Faraday rotator and the polarizers.

13. A method according to claim 12, wherein the bonding surfaces are so smoothed that the surface coarsenesses thereof are 10 nm or below.

14. A method according to claim 11, wherein a pushing force is exerted in such a direction as to bond the Faraday rotator and the polarizers when the Faraday rotator and the polarizers having the bonding surfaces thereof activated are brought into contact with each other in vacuum.

15. A method according to claim 11, wherein a step of integrally forming films made of an inorganic material on the bonding surfaces of at least either one of the Faraday rotator and the polarizers is performed before the step of activating

the bonding surfaces f the Faraday rotator and the polarizers.

16. A method according to claim 11, wherein a step of integrally forming films made of a soft material on the bonding surfaces of at least either one of the Faraday rotator and the polarizers is performed before the step of activating the bonding surfaces of the Faraday rotator and the polarizers.

17. A method for producing an optical isolator element including at least one flat Faraday rotator and at least two flat polarizers bonded to each other, comprising the steps of:

cleaning bonding surfaces of the Faraday rotator and the polarizers.

activating the bonding surfaces of at least either one of the Faraday rotator and the polarizers by the adsorption of hydroxyl groups, and

bringing the Faraday rotator and the polarizers into contact with each other in vacuum, thereby bonding the Faraday rotator and the polarizers by hydrogen-bonding forces acting between the hydroxyl groups on the bonding surfaces at one side and oxygen atoms in the other bonding surfaces.

18. A method according to claim 17, wherein a step of smoothing the bonding surfaces of the Faraday rotator and the polarizers is performed before the step of cleaning the bonding surfaces of the Faraday rotator and the polarizers.

19. A method according to claim 18, wherein the bonding surfaces are so smoothed that the surface coarsenesses thereof

are 10 nm or below.

20. A method according to claim 17, wherein a step of integrally forming films made of an inorganic material on the bonding surfaces of at least either one of the Faraday rotator and the polarizers is performed before the step of cleaning the bonding surfaces of the Faraday rotator and the polarizers.

21. A method according to claim 17, wherein step of integrally forming films made of a soft material on the bonding surfaces of at least either one of the Faraday rotator and the polarizers is performed before the step of cleaning the bonding surfaces of the Faraday rotator and the polarizers.